

## Curriculum Vitae

Charles B. Salemi

### Education:

University Of Massachusetts, Amherst, MA  
Bachelor of Science- Zoology

### Experience:

2003-present: Laboratory Supervisor II. Duties include overseeing and supervising the daily operations of the laboratory at the Boston section of the Department of Public Health's Drug Analysis Laboratory.

1980-2003: Served as Chemist 2, 3, and Laboratory Supervisor 1, in the Jamaica Plain Drug Analysis Laboratory. Duties included: analyzing unknown substances and submitting reports to the courts of Massachusetts, developing methods used in the analysis of illicit substances, responsible for the training of new chemists in the laboratory, overseeing the QA/QC program for the laboratory.

1974-1980: Served as a Bacteriologist 1 in the Department of Public Health Food and Drug Laboratory. Duties included the testing of retail food products, to insure microbiological and chemical compliance to the food sanitation code of the Commonwealth of Massachusetts.

### Additional training:

- Appointed Assistant Analyst for the Department of Public Health -1982
- Completed training course in methods of drug analysis given by the Federal Drug Enforcement Agency (DEA) in McLean Va. 1983.
- Completed training in the use of Fourier Transform Infrared Spectroscopy conducted at the Analect Instrument training facility 1984.
- Completed workshop in Solid Phase Extractions conducted by Baker Chemical 1984.
- Completed training in Polarized Light and Chemical Microscopy Techniques conducted by the Northeastern Association of Forensic Scientists (NEAFS) 1986.
- Completed workshop in Clandestine Laboratories (NEAFS) 1990.
- Completed training course in Capillary Gas Chromatography conducted by Hewlett-Packard 1991.
- Post Graduate Courses in Instrumental Chemical Analysis-Northeastern University 1982, and Human Toxicology, Harvard University 1983.
- Testified as an expert witness in numerous drug analysis cases in State and Federal Court.
- Served as the Department's representative on the Commonwealth of Massachusetts' Forensic Science Advisory Board 2005-2006

### Organizations:

- Massachusetts Organization of State Engineers and Scientists
- Northeastern Association of Forensic Scientists ( NEAFS)

## Curriculum Vitae

Elisabeth O'Brien

### Education:

Bachelor of Science, Biology; May 1988  
Bates College, Lewiston, Maine

### Experience:

Lab Supervisor I William A. Hinton State Laboratory Institute, Drug Analysis Laboratory  
March 2009-present

\*Responsible for oversight of the Massachusetts Department of Public Health Boston Drug Laboratory Evidence Office. Duties of the Evidence Office include receiving drug evidence from law enforcement agencies, maintaining chain of custody records, assigning samples to chemists, producing certificates of analysis for review by chemists.

Chemist III State Laboratory Institute, Drug Analysis Laboratory  
March 1990-October 2000, January 2002-March 2009

\*Completed six week training course conducted by senior staff within the Department of Public Health Drug Analysis Laboratory.

\*Appointed Assistant Analyst by the Assistant Commissioner of Public Health, March 1990.

\*Responsible for the identification of drugs to determine violations of harmful and narcotic drug laws.

\*Trained in the use of complex analytical instrumentation, microscopes and balances for the purposes of drug analysis.

\*Compile and edit a periodic drug lab newsletter for distribution to law enforcement agencies

\*Developed a heroin study to track heroin purity throughout Massachusetts, 1999-2000

\*Attended the Drug Enforcement Administration's Forensic Chemist Seminar in McLean, VA June 1992.

\*Qualified as an expert witness in Massachusetts courts and U. S. District Court

\*Notary Public

\*Member Northeast Association of Forensic Scientists (NEAFS)

Assistant Deputy Superintendent, Plymouth County Sheriff's Department, MA

March 2001-September 2001. \*Responsible for operations of the Bureau of Criminal Investigation crime laboratory

\*Began comprehensive training in fingerprint analysis under the direction of a certified latent print examiner.

\*Completed training in Evidence Handling and Crime Scene/DNA considerations sponsored by the Massachusetts State Police at Cape Cod Community College, June 2001

\*Attended symposium for Automated Fingerprint Identification System May 2001

Research Technician, Theobald Smith Research Institute, Boston, MA, 1989-1990

\*Worked in the newborn screening division of the Department of Public Health to determine the seroprevalence of HIV in newborns.

\*Provided technical assistance for the journal article "Early diagnosis of HIV infection in infants by detection of IgA HIV antibodies" published in The Lancet 1990.

\*Provided technical assistance under the direction of Dr. Rodney Hoff for the abstract "Seroprevalence of HTLV-1/2 and HIV 1 in intravenous drug users in Boston"

## Curriculum Vitae

Peter Piro

### EDUCATION

Boston University

B.A. in Chemistry and Minor in Biology, 1989

### HONORS

Magna Cum Laude, 3.6 GPA

Graduated with Distinction in Chemistry

Valedictorian of the Chemistry Department

### EXPERIENCE

#### **Department of Public Health/State Laboratory Institute**

Laboratory Supervisor I/Chemist III, II, I/ Assistant Analyst      December 1991-Present

Supervise the operation and maintenance of the Gas Chromatography/Mass Spectrometry Laboratory. Train staff and coordinate schedules. Analyze controlled substances for State and Federal law enforcement agencies. Develop, oversee, and make improvements to the GC/MS laboratory's quality assurance/quality control (QA/QC) program. Serve as the Technical Supervisor of the Drug Analysis QC Program. Responsible for planning and implementing Quality Improvement (QI) projects. Make recommendations for protocols and procedures by developing methods so work can be performed in an accurate and efficient manner. Work with the Purchasing Department to procure laboratory supplies. Qualified as an expert witness in Massachusetts courts and in U.S. District Court.

#### **Massachusetts Health Research Institute**

Laboratory Technician

September 1990-December 1991

Researched the seasonal and special occurrences of DSP and PSP in shellfish samples harvested from coastal waters and Georges Bank using cELISA/bioassays.

### TRAINING AND ORGANIZATIONS

\* Completed a six-week training course by senior staff within the Department of Public Health Drug Analysis laboratory.

\* Appointed Assistant Analyst by the Assistant Commissioner of Public Health in February 1991, Notary Public since 1993.

\* Elected as a Regular Member to the Northeastern Association of Forensic Chemists on October 27<sup>th</sup> 1995 and a member of the Massachusetts Organization of State Engineers and Scientists.

\* Completed training in Mass Spectrometry given by the Food and Drug Administration/Forensic Chemistry Center on November 2002.\* Completed Mass Spectrometry Troubleshooting and Maintenance, Agilent Technologies,2002\* Completed Restek GC/MS Training, 2011\*Completed DEA Forensic Chemist Training, Special Testing and Research Laboratory, 2011.

## Curriculum Vitae

Della Saunders

### Education:

Boston University Boston, MA. Bachelors of Arts in Chemistry 1982

### Experience:

**1985-present:** Currently Chemist III Massachusetts Department of Public Health Drug Analysis Laboratory at State Laboratory Institute Boston, MA. Responsible for analyzing unknown substances submitted by Massachusetts law enforcement agencies; operating, maintaining, and interpreting data from analytical equipment (analytical balance, microscope, gas chromatogram, ultraviolet spectrometer, infrared spectrometer, gas chromatogram/mass spectrometer); training junior level chemists; providing expert testimony to local, state, and federal courts in the Commonwealth of Massachusetts.

**1984-1985:** Laboratory Technician in the Media Laboratory at State Laboratory Institute Boston, MA. Responsible for making chemical reagents and media plates; operating and maintaining laboratory equipment (autoclave, pH meter, ultra-violet hood), and collecting safety data for laboratory protocols.

### Training:

**1985:** Six week training with Senior Staff at Massachusetts Department of Public Health (MDPH) Drug Analysis Laboratory Boston, MA. Appointed Assistant Analyst MDPH

**1987:** One week training course in drug analysis given by the Federal Drug Enforcement Agency (DEA) McLean, VA.

**1992:** Training in Gas Chromatograph/Mass Spectroscopy (GC/MS) Hewlett Packard (Agilent)

**1996:** Training in Fourier Transform Infra-Red Spectroscopy ETA (Analect)

**2001:** Expert Witness Workshop National Laboratory Training network Quality Assurance/Quality Control Training (MDPH)

**2002:** Techniques of Supervision Training (MDPH)

**1999:** Notary Public Commonwealth of Massachusetts

## Curriculum Vitae

Michael Lawler

### Education:

University of Virginia, Charlottesville, Va. Bachelor of Arts in English, 1975

Harvard University, Cambridge, Ma. Master of Arts in biology, 1995

### Experience:

1990-present currently Chemist III, Mass. Dept. of Public Health, Drug Lab analyst determining the identity of unknown substances and providing expert testimony in the Courts. Conduct special testing for poisons within drug exhibits (e.g. strychnine in MDMA)

2005-2008 lecturer in chemistry, Curry College, Milton, Ma.

1988-1990 New England Newborn Screening (NENS) Biochemist conducting pilot studies and validation trials of new newborn screening tests. Investigator and co-author of papers noted below. Introduced screening test for Biotinidase Deficiency. Liaison with interstate collaborators in national studies.

1983-1988 Supervised NENS urine screening lab for metabolic disorders. Conducted research in collaboration with Children's Hospital (Boston) detecting neuroblastoma, a cancer of early childhood. Conducted reference testing for rare metabolic disorders for an international audience.

1982-1983 NENS hypothyroid assay technologist with Tuft's University

1979-1981 Mass. Bay Community College, staff technologist preparing materials for the laboratory technician program, which included reagents, apparatus and maintaining stock cultures of human pathogens.

### Additional education and special training

Drug Analysis, completed six week training course by senior staff within the Department of Public Health Drug Analysis Laboratory

National Laboratory Network Training Program course as Expert Witness

Qualified as an expert witness in the Massachusetts Courts and the U.S. District Court

Current Drug Trends – Multijurisdictional Drug Task Force Academy August 2009

CDC course in public health response to bioterrorism

U.S. Army course in biologic warfare and terrorism

DEA Special Testing Lab Seminar June 2011

Sigma-Aldrich LC/MS – New Applications Fall 2011

### Journal Publications

Screening, 1992, 1:34-37; Lawler,M., Frederick,S., Rodriguez-Anza, S., Wolf,B., Levy,H., *Newborn Screening for Biotinidase Deficiency, Pilot Study and Follow-up of Identified Cases*

Genetic Screening, 1990, 11-18, Mitchell,M., Lawler,M., Walraven,C., Hermos,R., *To Screen or Not to Screen for Congenital Hyperplasia: Is that the Question?*

The Journal of Pediatrics, 116: 78-83, Secor-McVoy,J., Lawler,M., Schmidt, M., Ebers,D., Hart,P., Pettit,D., Blitzer,M., Wolf,B., *Partial Biotinidase Deficiency: Clinical and Biochemical Features*

### Professional Affiliations

Northeastern Association of Forensic Scientists (NEAFS) since 2005

### Awards

Theobald Smith Education Grant for graduate studies

## Curriculum Vitae

Daniel Renczkowski

### Education

Degree: Bachelors of Science in Forensic Chemistry,  
May 2005 from Buffalo State College  
GPA: 3.84, Dean's List, Honor's Recognition  
American Chemical Society Undergraduate Award  
Phi Lambda Upsilon Membership

Related Coursework: Analytical Chemistry      Physical Chemistry  
Organic Chemistry I and II      Instrumental Chemistry  
Biochemistry      Forensics Laboratory  
Chemistry of Criminalistics      Physical Evidence  
Anatomy      Physiology

### Employment

Massachusetts Department of Public Health Drug Analysis Laboratory

Chemist I (October 2005 – March 2008)

Chemist II (March 2008 – present)

- Successfully completed an eight week training course in the analysis of drugs conducted by senior staff
- Successfully completed GC/MS training program
- Responsible for the identification of substances to determine violation of the Controlled Substances Act of the Massachusetts General Laws
- Responsible for maintenance and repairs of analytical instruments
- Responsible for quality control of analytical instruments and standards
- Qualified as an expert witness in United States District Court and Massachusetts Superior and District Courts

### Related Experience

Niagara County Forensics Laboratory

Forensic Internship, January 2005

- Conducted research on the presumptive testing of saliva
- Conducted research on the identification and detection of lubricants
- Observed all aspects of the laboratory including drug analysis, firearms comparison, trace evidence, arson investigation, toxicology, and serology
- Daily use of FTIR microscope and DuraSamplerII
- Familiarized with GC/MS programs

### Related Trainings

HIDTA Clandestine Lab Awareness	2/16/2007
APHL Chain of Custody	3/19/2008
APHL Expert Witness	4/19/2008
HIDTA Current Drug Trends	5/20/2008, 8/03/2009
Restek GC/MS Training Seminar	4/27/2011

## Curriculum Vitae

Mai Ngoc Tran

### Education

**M.S. Medicinal Chemistry (1990)**

Northeastern University, Boston, MA

**Coursework included:** organic & inorganic chemistry, physical chemistry, qualitative and quantitative chemistry, analytical and advanced organic chemistry.

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### Employment

**Chemist II State Laboratory Institute (2001-Present)**

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substances to determine violation of the Massachusetts harmful and narcotic drug laws.
- Operate analytical instrumentation, microscopes and balances for forensic drug analysis

**Chemist I State Laboratory Institute (1986-2001)**

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance to determine violation of the Massachusetts harmful and narcotic drug laws
- Operate analytical instrumentation, microscopes and balances for forensic drug analysis
- Successfully completed an six week training in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- Appointed assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 1986.

**Laboratory Technician State Laboratory Institute (1982-1986)**

- Prepared reagents, Blood agar plates.

## Curriculum Vitae

Nicole E. Medina

### Education

**Bachelor of Science, Chemistry** (1995)

Emmanuel College, Boston, MA

**Research Project:** (1994)

In-Vivo Mapping of Cocaine Metabolites in Biological Fluids

Conducted at Massachusetts State Police Crime Lab, Toxicology Department

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### Employment

**Chemist II State Laboratory Institute (March 2008-Present)**

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substances and trafficking substances to determine violation of the Massachusetts drug laws
- Responsible for the identification of pharmaceuticals to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation, microscopes and balances for forensic drug analysis

**Chemist I State Laboratory Institute (2004-March 2008)**

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation, microscopes and balances for forensic drug analysis
- Successfully completed an eight week training in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- Appointed assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2005.

**Research Associate**

(September 2001 – October 2004)

Wolfe Laboratories, Newton & Watertown, MA

**Laboratory Technician**

(January 1996 - April 1997)

Gillette, Boston, MA



## Curriculum Vitae

Kate A. Corbett

### Education

**Bachelor of Science Degree, CHEMISTRY May 2003**

**MERRIMACK COLLEGE**

Coursework included: Organic Chemistry, Inorganic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus

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### Employment

**Chemist II State Laboratory Institute (March 2008-Present)**

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance and trafficking substances to determine violation of the Massachusetts drug laws
- Responsible for the identification of pharmaceuticals to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation, microscopes and balances for forensic drug analysis

**Chemist I State Laboratory Institute (2005-March 2008)**

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation for the purpose of performing forensic drug analysis
- Successfully completed an eight week training course in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- Appointed an assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2005.

**Research Associate (September 2003 – August 2005)**

SENSOR TECHNOLOGIES, INC - Shrewsbury, MA

- Prepared chemistries used in making sensor beads
- Generated and examined sensors employing fluorescence spectroscopy
- Performed protein, dye and sugar assays using UV/VIS spectrophotometry
- Carried out titrations on ricin using fluorescence correlation spectroscopy
- Statistical analysis of experimental data

**Intern (March 2003 – August 2003)**

MASSACHUSETTS STATE POLICE CRIME LABORATORY - Sudbury, MA

- Assisted in the gathering of case files to fulfill the National Institute of Justice's No Suspect Backlog Reduction Grant
- Observed in the Evidence, Criminalistics, DNA, Drug, Trace, Toxicology, and Bomb/Arson Units

## Curriculum Vitae

Lisa A. Glazer

### Education

Bachelor of Science Degree, CHEMISTRY January 2006

UNIVERSITY OF NEW HAVEN

Coursework included: Organic Chemistry, Inorganic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus

Bachelor of Science Degree, FORENSIC SCIENCE January 2006

UNIVERSITY OF NEW HAVEN

Coursework included: Organic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus, Biology, Criminal Justice and Forensic Science courses

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### Employment

Chemist I, II State Laboratory Institute (May 2007-Present)

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation for the purpose of performing forensic drug analysis
- Successfully completed an eight week training course in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- Appointed an assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2007.

Laboratory Technician I (August 2006 – May 2007)

University of Connecticut Chemistry Department - Storrs, CT

- Prepared unknowns, chemical reagents and supplies for undergraduate chemistry courses
- Set-up experiment demonstrations
- Properly disposed of hazardous waste from the experiments
- Made sure labs were being conducted safely
- Kept track of student laboratory paperwork, inventoried glassware and chemicals and helped clean glassware

Intern (September 2005 – November 2005)

CONNECTICUT STATE POLICE FORENSIC LABORATORY - Meriden, CT

- Worked on a Pyrolysis Gas Chromatography project
- Observed in the GSR testing, Forensic Biology, DNA, Questioned Documents, Black and White Photo, Latent Prints, Firearms, Trace Evidence and Color Photo Units

### Trainings

Multijurisdictional Counterdrug Task Force Training (May 20, 2008)

Current Drug Trends – Methuen, MA

Multijurisdictional Counterdrug Task Force Training (May 6, 2009 - May 7, 2009)

Courtroom Testimony – Methuen, MA

DEA Forensic Chemist Seminar (June 21, 2010 - June 25, 2010)

Sterling, VA

## Curriculum Vitae

Daniela Frasca

### Education

Suffolk University, Boston, MA

Graduated in 05/1996 and received a Bachelor of Science in Biochemistry

### EXPERIENCE

Massachusetts State Laboratory Institute/DPH, Jamaica Plain, MA 01/2001 – present

Drug Laboratory: Chemist II

- Analysis of all substances by chemical screening, microscopy, and instrument confirmation to determine the presence of drugs for law enforcement agencies in the Commonwealth of Massachusetts.
- Appointed assistant analyst on January 29, 2001 by the Assistant Commissioner of DPH
- Completed four weeks of training in drug analysis under the supervision of senior chemists.

Quest Diagnostics Incorporated, Cambridge, MA

09/1996 – 10/2001

Department of Toxicology: Medical Technologist I

- Handles comprehensive toxic analysis, therapeutic drug monitoring, forensic drug screening, and compound ID's of biohazard samples utilizing standard operating procedures in clinical toxicology.
- Entered data and interpreted results for reporting
- QC/QA of multiple analytical instrumentation as well as maintenance
- Completed 60 days of training under the supervision of doctorate level toxicologists.

### Additional Training and Graduate Courses

Boston University School of Medicine

Forensic Toxicology	Bloodstain Pattern Analysis	Forensic Pathology
Pattern Evidence Analysis	Trace Evidence Analysis	
Forensic Biology	Criminal Law Mock Court (Expert Witness)	

Northeastern Association of Forensic Scientists

Designer Drugs	Clandestine labs
Agilent Instruments and Software	Digital Photography

McCrone Research Institute

Scanning Electron Microscopy and X-ray Microanalysis	Forensic Polarized Microscopy
Polarized Microscopy of Illicit Drugs and Excipients	Chemical Microscopy
Sample Preparation and Manipulation for Microanalysis	

Massachusetts State Laboratory Institute

Expert Witness Testimony	Portable Raman Spectrometry
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### Associations and Programs

- Northeastern Association of Forensic Scientists (NEAFS)
- The International Association of Forensic Toxicologists (TIAFT)
- The International Association of Therapeutic Drug Monitoring And Clinical Toxicology (IATDMCT)
- Massachusetts State Science Fair Judge
- Middle School State Science Fair Judge
- TTT Mentor Science Project Mentor/Tutor Volunteer

## Curriculum Vitae

Hevis Lleshi

### Education

Boston University School of Medicine – Master of Science, Forensic Science  
University of South Florida – Bachelor of Arts, Clinical Psychology

### Related Coursework

Forensic Chemistry • Forensic Toxicology • Forensic Pathology • Forensic DNA Analysis  
Organic / Analytical Chemistry • Forensic Biology • Biochemistry • Forensic Trace Evidence

### Employment

March, 2011 – Present  
Chemist I, Massachusetts Department of Public Health,  
Drug Analysis Laboratory

- Appointed Assistant Analyst by Assistant Commissioner of Public Health, June, 2011
- Responsible for the identification of substances to determine violation of harmful and narcotic drug laws of the Commonwealth of Massachusetts
- Trained in the use of complex analytical instrumentation for the purpose of forensic drug analysis
- Qualified as an expert witness in the Massachusetts Courts
- Notary Public

### Additional Training and Laboratory Experience

- DEA Forensic Chemist Training- Special Testing and Research Laboratory, VA, March 2012
- Completed ten-week training course conducted by Laboratory Senior Staff within the Department of Public Health, Drug Analysis Laboratory, 2011
- GC and GC/MS training with Restek, 2011
- Mock Court/Testimony Techniques, Boston University, 2009
- Instrumental Forensic Chemistry/Toxicology Laboratory, Boston University, 2009
- Serology/Bloodstain Pattern Analysis Techniques, Boston University, 2009

### Internship

Massachusetts State Police – Marine Section, Boston MA, 2009-2010

### Associations

- American Academy of Forensic Sciences (AAFS)
- Boston University Forensic Science Society (BUFSS)